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Environmental Document Process Improvement  
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STATE DOCUMENTS

## INTRODUCTION

### Background

In 1969, the United States Congress passed the National Environmental Policy Act (NEPA). NEPA was promulgated and implemented in response to man's activities that resulted in impacts to the nations' human and natural resources. These impacts were primarily development related (i.e. population growth, urbanization, industrial expansion, resource exploitation due to new technologies, etc.). NEPA declared a national policy that encouraged harmony between man and the environment (Pub. L. 91-190, 42 U.S.C. 4231-4347, as amended). Additionally, NEPA required all federal agencies to promulgate policies and procedures for implementing NEPA.

The Federal Highway Administration (FHWA) and the Urban Mass Transportation Administration (UMTA) promulgated Code of Federal Regulations, Title 23, Part 771 (CFR 771) in response to NEPA. This regulation prescribes the policies and procedures for environmental impacts and related procedures. As the lead federal agency for highway related transportation activities, the FHWA provides federal funding and oversight to the South Carolina Department of Transportation (SCDOT). The SCDOT must comply with CFR 771 when developing federal-aid transportation projects.

### Problem Defined

As previously stated, CFR 771 requires that environmental documentation be completed on all federal-aid transportation projects developed by the SCDOT. These documents contain the results of environmental investigations that evaluate the potential environmental impacts resulting from transportation projects, such as new location

roadways, roadway widening, and bridge replacements. A variety of decisions are made throughout the process and approvals have to be secured from outside agencies with jurisdiction over particular environmental issues. The Federal Highway Administration must approve the documents prior to the SCDOT obligating funds for rights-of-way. The environmental process is part of the project development process that has concurrent or sequential steps for completion of each activity (Figure 1). This proposed process improvement would review and modify the current environmental work process to reduce the timeframe for document approvals in order to decrease project schedule delays. This would benefit the SCDOT by providing for a more predictable and timely project development process.

#### Evidence of Problem

Based on data gathered from an in-house project management system for a five-year period from 1998 through 2002, the median time for completion of environmental documents (EA) is 14 months. This includes a range of 4 to 24 months. Due to the critical nature of the environmental process, and in response to a Federal Highway Administration initiative, this process improvement was proposed to reduce the time for document completion to less than 12 months. <sup>(on average?)</sup> The SCDOT has been developing process improvements in all areas of the project development process; therefore, a concomitant reduction needs to be realized in the environmental process. This process improvement has been ongoing since 2000 and will be a continuing effort that will be expanded into our environmental permitting process. This report will outline the results that have been realized thus far.

### Project Scope

The basis of this project is to complete a process diagram of the steps in the document approval process to assess any duplication of efforts, assess where steps could move concurrently, assess where decisions are being made and if they could be made earlier in the process, and any steps that may be unnecessary. This should allow a better assessment of current practices and any modifications that need to be made to speed up the project delivery process. Part of the result could be to propose initiatives with outside agencies to reduce their review and decision-making processes with respect to transportation projects.

## PROCESSES

### General Process

The environmental document process involves completing investigative studies to determine the potential impacts to the human and natural environment resulting from transportation actions. These studies are compiled into project specific documents that vary in complexity and requirements according to the level of significance of the impacts. Significance is defined by two parameters; namely, context and severity (CFR 771). Context deals with the totality of the impacts as compared to the whole (i.e. one acre of wetland impacts within a ten acre wetland is more significant than the same one acre within a 100 acre wetland). Severity deals with the permanence of the impacts (i.e. whether the impacts are temporary or permanent).

Once the project studies are complete, the results are then compiled into one of three types or classes of documents (Figure 2). Categorical Exclusions (CEs), also known as Class II actions, are those actions that neither individually nor cumulatively have a significant impact on the environment, and, are therefore, categorically excluded from a higher level of documentation. These documents are primarily approved by the SCDOT with only a few exceptions. There are three categories of CEs; namely, CEA, CEB and CEC. The difference between the three types is the level of impact.

Environmental Assessments (EAs), or Class III actions, are actions in which the significance of the impacts is not clearly established. If the data within the EA indicates that the impacts are significant, then an EIS will be prepared. If the actions are not significant but the impacts are greater than those allowed under the CE, then the EA process will continue and result in a Finding of No Significant Impact (FONSI).

Environmental Impact Statements (EISs), or Class I actions, are actions that significantly affect the environment. The initial data are compiled into a Draft Environmental Impact Statement (DEIS), a Final Environmental Impact Statement (FEIS) and will terminate with a Record of Decision (ROD). Various requirements have to be complied with within each class of actions and are outlined within CFR 771 and the FHWA Technical Advisory T6640.8A.

#### General EA/FONSI Process

Once an action is classified as an EA, a specific process is followed (Figure 3). The appropriate studies are completed and compiled as an EA. Once an EA is completed the document must be distributed to various agencies and a Public Hearing is usually held

Figure 1

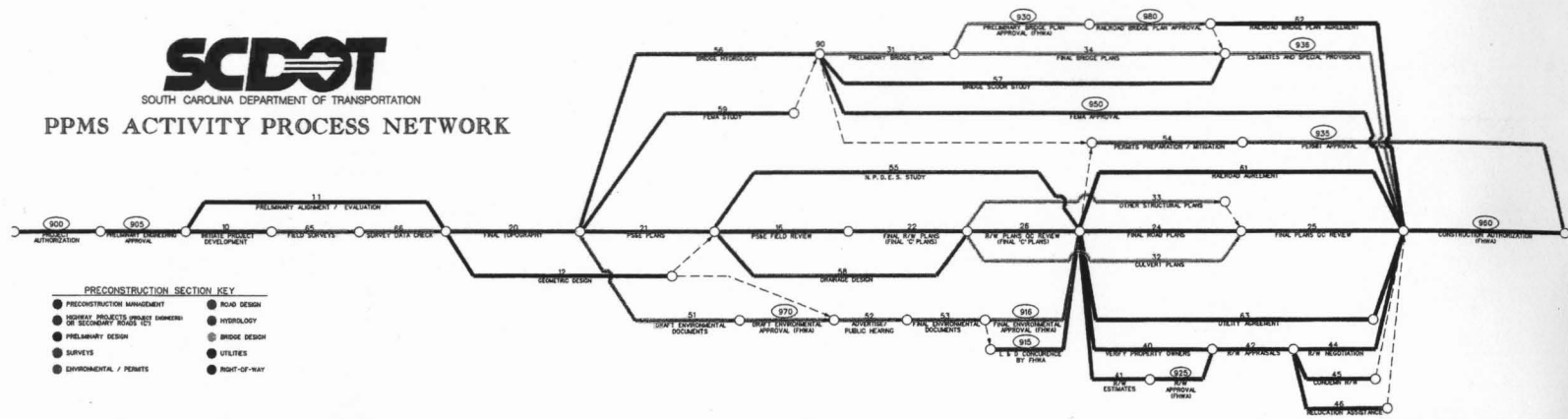


Figure 2. General Process

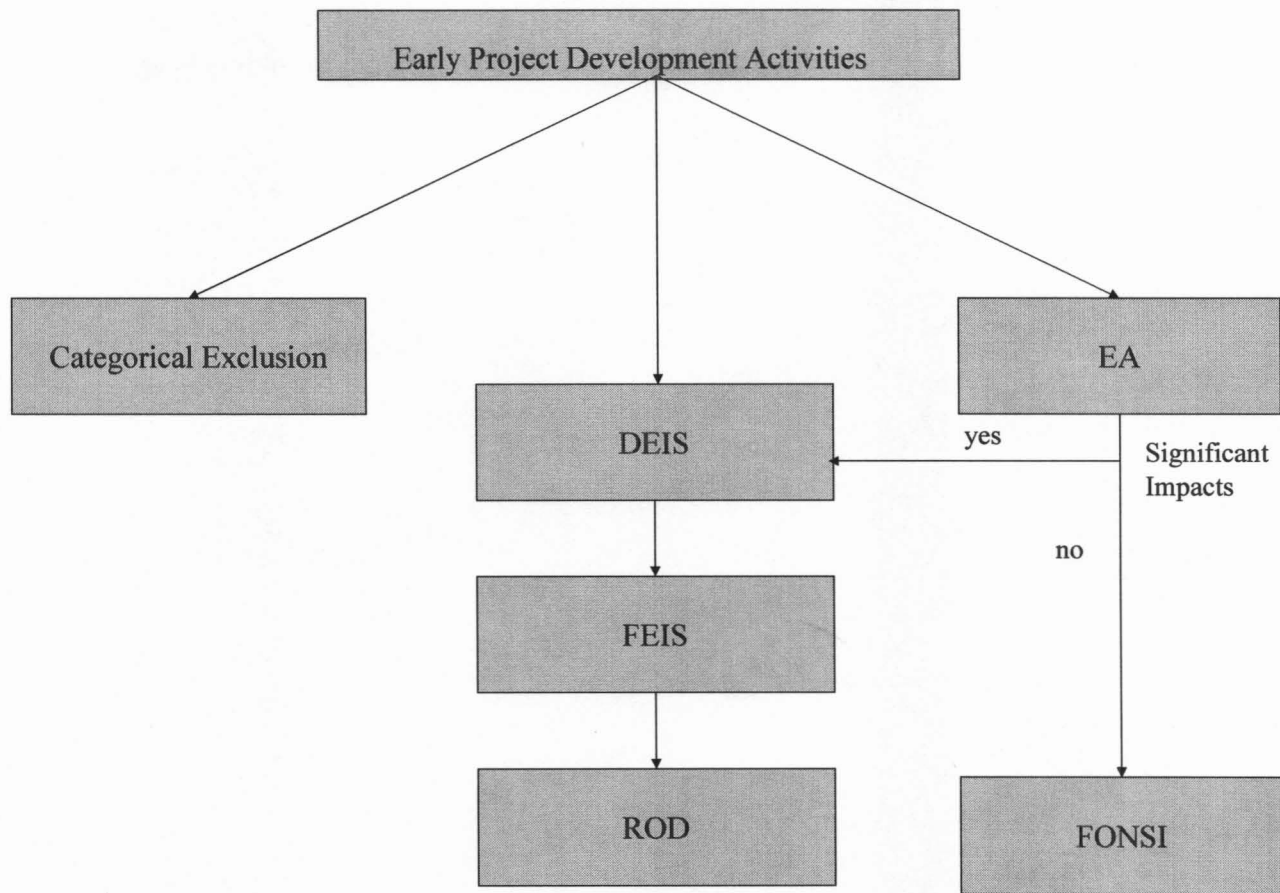
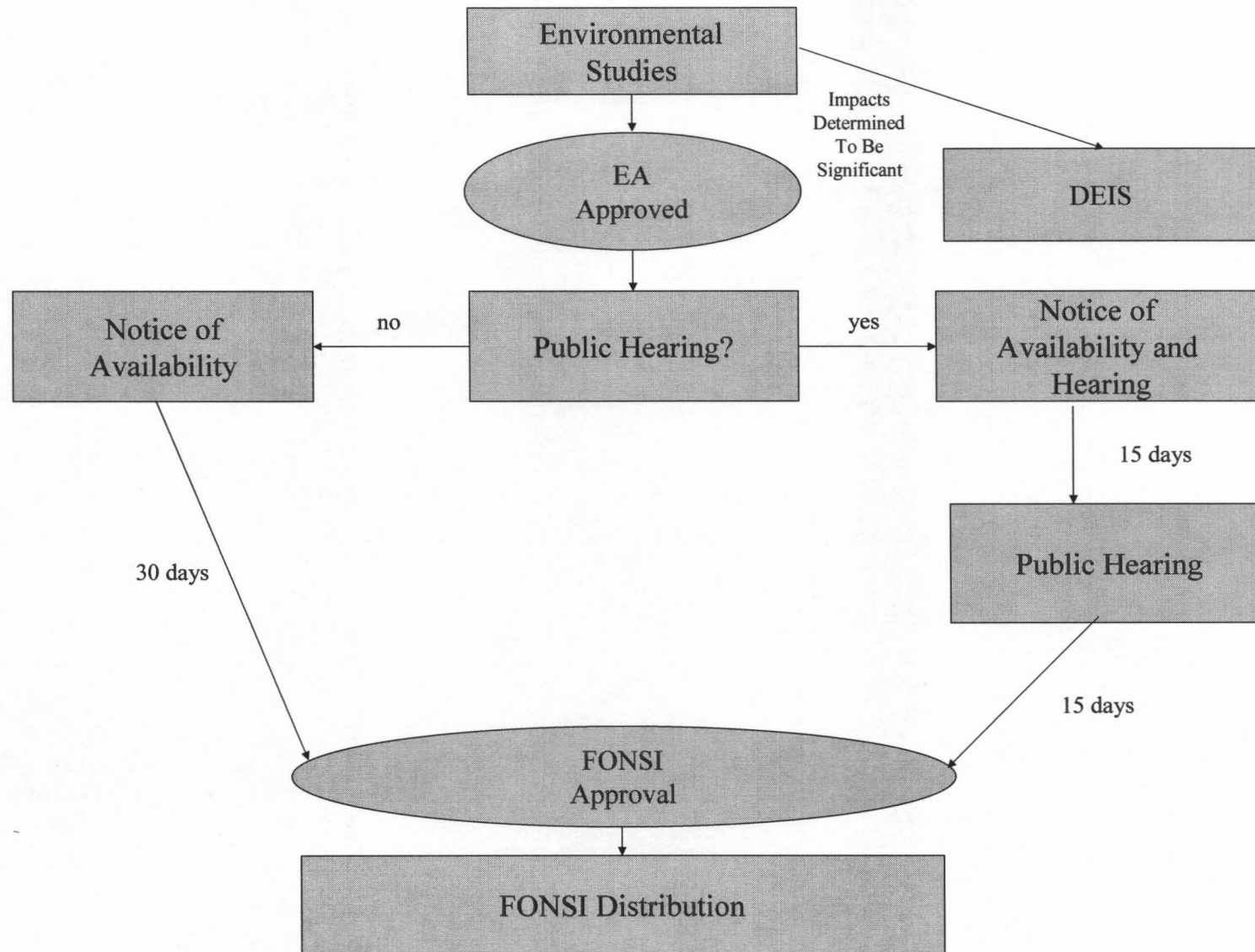


Figure 3. General EA/FONSI Process



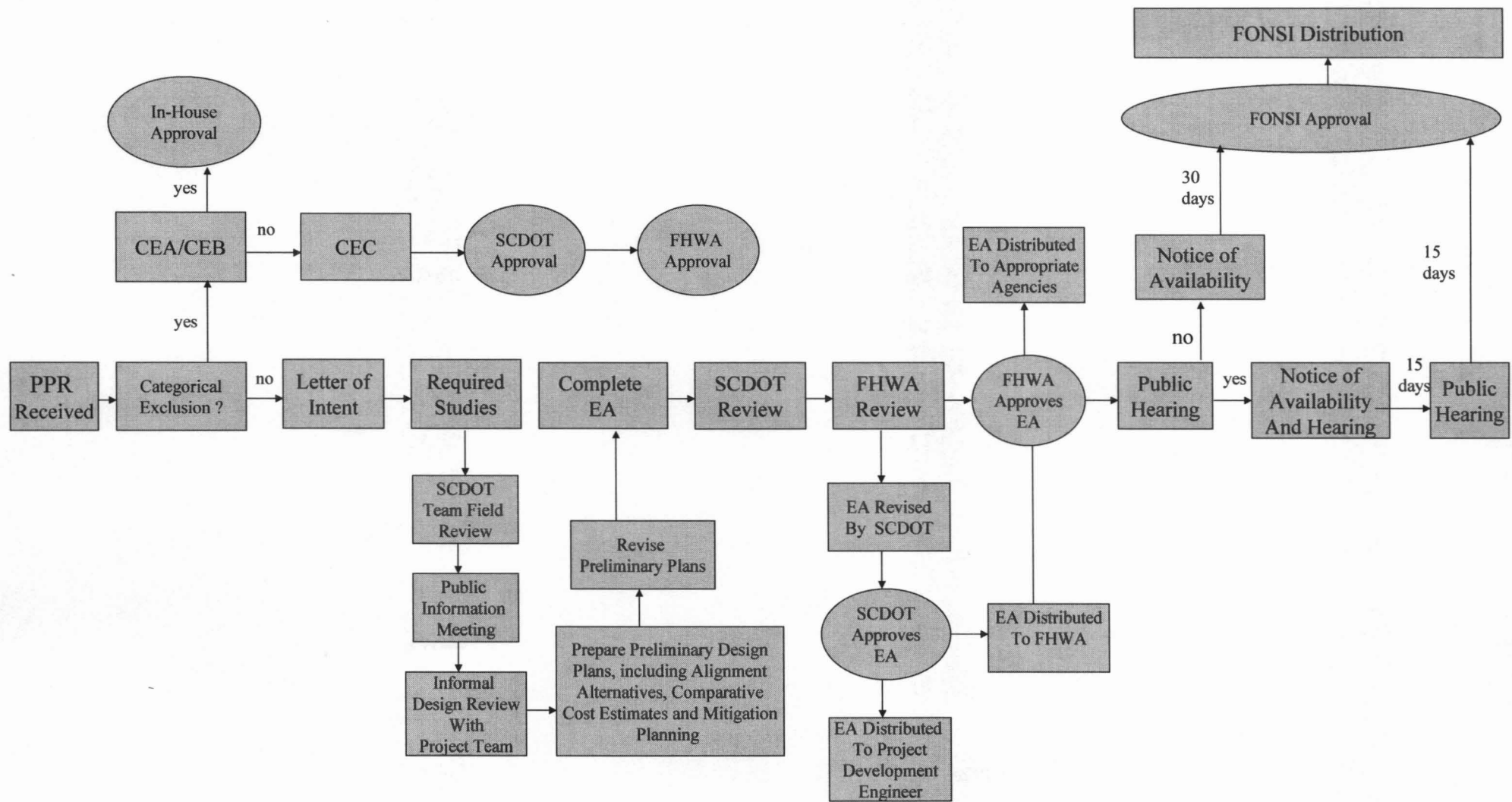


to afford the public an opportunity to comment on the proposed project. If the public hearing is held, it must be advertised at least 15 days in advance with a total comment period of 30 days. The SCDOT usually issues a Notice of Availability and Hearing, 15 days prior to the public hearing, and then allows an additional 15 after the public hearing to receive public comments. The SCDOT responds to all comments received with all correspondence becoming part of the official EA record. If a Public hearing is not held, then a Notice of Availability is advertised for 30 days. All advertisements are published in a local newspaper where the action is taking place and also in a paper of statewide distribution. After the public hearing and comment period is over, then a request for a FONSI is made to the FHWA. Once the FONSI is issued it must be distributed to all agencies participating in the action. *if appropriate?*

#### SCDOT EA Process

The emphasis for this process improvement concerns the present SCDOT EA process. As can be seen in Figure 4, the process involves various steps. The first step in the process is the receipt of the Project Planning Report (PPR). The PPR is prepared by the engineer responsible for the project action area and contains information necessary to commence the environmental document process. Once the PPR is received a decision is made as to whether a CE can be completed or if the action must follow the EA/EIS process. If the action qualifies for the CE process, then a decision is made as to whether it is a CEA or CEB. If so, then a document is prepared and approved by the SCDOT. If the action requires a slightly higher level of documentation, then a CEC is completed and approved by the SCDOT and the FHWA. If the action does not qualify for a CE, then an

Figure 4. SCDOT EA Process

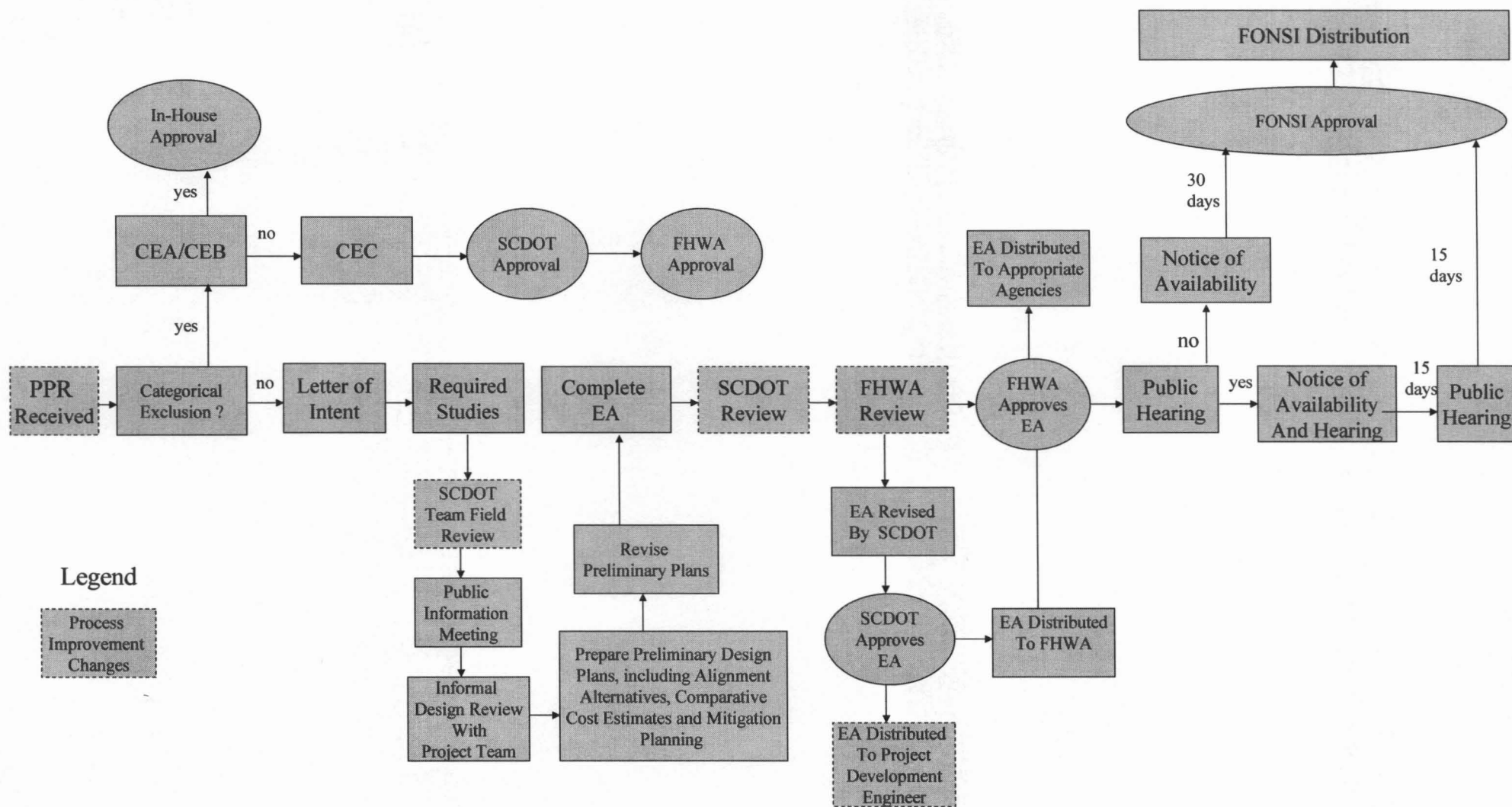


EA is prepared. The FHWA Technical Advisory T6640.8A describes the particular format for the EA. Normally, a Letter of Intent (LOI) is distributed to all resource and regulatory agencies with jurisdiction over some part of the action, as well as all affected governmental officials. Once the LOI is distributed, the appropriate studies are commenced. These studies include such things as purpose and need, alternatives analysis, affected environment (cultural, natural and human), and environmental consequences. The studies are based on a preliminary design that is completed after a field review and Public Information Meeting is held. All issues and concerns noted in the field as well as comments from the public are incorporated into this preliminary design. Once the appropriate studies are completed an EA is completed and reviewed by the SCDOT prior to submitting to the FHWA for their approval. If the FHWA has any comments, then the document is revised accordingly and resubmitted for FHWA approval. Once approved, the document is distributed to all appropriate parties and a public hearing is scheduled, if required (see General EA/FONSI Process section). If comments are received as a result of the public hearing they are considered and incorporated into the project. The EA is then revised or the comments can be included in the FONSI request. Once the FONSI request is approved, the document process is complete and Rights-of-Way can then be started.

## RESULTS

Various improvements have been identified and implemented during the course of this process improvement (Figure 5). Initially, the PPR was revised to include additional information that was lacking, from an environmental perspective. This information

Figure 5. SCDOT EA Process Improvements



helped environmental project coordinators reduce the amount of coordination time needed with respect to in-house informational needs. In the past, information had to be coordinated through various sections within the agency. By revising the PPR, the Program Manager (the engineer who completes the PPR) now provides the needed information that helps reduce coordination efforts by environmental personnel.

SCDOT funds liaison positions at four resource and regulatory agencies. These positions were intended to assist the SCDOT in document review and permitting processes by being dedicated to SCDOT projects. It was identified that these positions were not being fully utilized. As a way to incorporate resource and regulatory concerns earlier in the project development process, these liaison personnel are now invited to attend early scooping meetings to assist in identifying any environmental concerns prior to preliminary design. Incorporation of these concerns into the preliminary design process reduces the need for design revisions by allowing design engineers to consider environmental concerns early on. Future efforts are to have liaison personnel assist with development of the purpose and need and alternative analysis. Identifying and incorporating resource and regulatory agency concerns earlier in the process helps reduce time and effort by reducing or avoiding the need for project redesign.

The EA review process was also identified as an area that could be modified. Originally, the SCDOT would review the EA make any changes necessary and then submit to the FHWA. The FHWA had up to 30 days to review and comment on the EA. The decision was made to have the SCDOT and FHWA review take place concurrently, instead of sequentially. This was especially important when reviewing consultant-drafted EAs. The SCDOT would review the document then have the consultant make any

necessary changes prior to submitting the document to the FHWA. If the FHWA had additional comments, then the consultant had to revise the document for a second time. This sometimes caused delays in the approval process. Presently, the FHWA and the SCDOT review the documents and then discuss the comments together and drafts one list of comments for the consultants to incorporate into the EA. In this way, the revised document should be ready for approval after the first modification. This improvement reduces the environmental review process by at least 30 days.

The last improvement involved the deletion of an unnecessary step. Once the above-mentioned review process was complete the SCDOT would sign the EA and then forward it to the FHWA for signature. The SCDOT would concurrently send a copy of the SCDOT-signed EA to various personnel within the SCDOT. It was identified that this was an unnecessary step since the EA was only official after approval by the FHWA. This improvement does not reduce the timeframe for EA approval but does make the process more efficient by deleting unnecessary paperwork

### SUMMARY

Various improvements have been identified/made during the course of this process improvement. Steps were identified where additional early coordination should take place with outside agencies, steps that could be combined, and steps that could be deleted. Implementation of these improvements has been a collaborative effort between the SCDOT and the FHWA. Management at both agencies understands the need for process improvements and supports any efforts to that end. The process improvement effort is an on-going effort and is not a separate activity from the environmental process.

The environmental process is continually reviewed and assessed by SCDOT environmental personnel to identify any improvements that can be made to streamline the process. This assessment is done while working within the system. When potential areas of improvement are identified, SCDOT and/or FHWA environmental personnel discuss the benefits and the improvement will be implemented if it does not conflict with any policies or procedures. Downloads of information from the in-house project management system will be evaluated every two years to evaluate any further time reductions. The last five-year highway transportation bill identified streamlining as an environmental initiative. The proposed new highway bill continues this streamlining effort. Due to the national goals of improving all transportation processes, this present effort will continue to be a vital part of the environmental document process as well as other activities undertaken by the SCDOT.

LITERATURE CITED

National Environmental Policy Act, Pub. L. 91-190, 42 U.S.C. 4231-4347, as amended.

Code of Federal Regulations, Title 23, Part 771, Highways.

FHWA Technical Advisory T6640.8A.